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EXAMINER	
HENNING, MATTHEW T	
ART UNIT	PAPER NUMBER
2431	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	09/754,519	SHIBUYA ET AL.	
	Examiner	Art Unit	
	MATTHEW T. HENNING	2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 June 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12 and 15-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *12 and 15-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 January 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

This action is in response to the communication filed on 6/29/2009.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 6/29/2009 have been fully considered but they are not persuasive.

Regarding the applicants' assertion that certain paragraphs of the specification do provide support for the limitation of "transferring copyrighted music data to the external storage card even if power of said central processing unit is turned off", the examiner does not find the argument persuasive. The sections cited by the applicants, once again, only show support for reading music data from the external storage card even if power of said central processing unit is turned off. These sections are silent to with respect to writing music content to the external storage card even if the power of said central processing unit is turned off. In fact, the only portion of the section cited by the applicants that pertains to writing music data to the external storage card states "**On the basis of commands issued by CPU 51** and supplied via the bridge 58, the memory card driver 151-1 cross-authenticates the memory card 21-1 loaded in the personal computer 1. **Under the control of the CPU 51**, the memory card driver 151-1 stores the music data supplied from the HDD 67...into the authenticated memory card 21-1...via the bridge 58". This clearly states that writing of music data to the memory card is under control of the CPU. Therefore, for writing, the CPU must be powered. Therefore, the cited section does not provide support for the claim limitation. Therefore, because the applicants have failed to show proper support for the claimed subject matter, and the examiner is unable to find such

support in the specification as originally filed, one of ordinary skill in the art would not be able to determine **whether the applicants were in possession of the invention as claimed at the time of application**. Therefore, the examiner does not find the argument persuasive, and has maintained the objection to the specification and the rejection of the claims under 35 USC 112 1st Paragraph.

Regarding the applicants' argument that Fig. 12 shows the claim feature and therefore the objection to the drawings should be withdrawn, the examiner does not find the argument persuasive. Fig. 12, and the description thereof, merely shows the process for writing music data to the external storage card. In no way does Fig. 12 show that this is done even if power of said central processing unit is turned off. As such, the examiner has maintained the objection to the drawings.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, it is the combination of Tatebayashi and Chan, and what their teachings would suggest to the ordinary person skilled in the art at the time of invention, which have been relied upon in rejecting the claims.

Regarding the applicants' argument that Chan does not teach that "said power controller supplies power to said cross-authentication mechanism and said control mechanism even if power of said central processing unit is turned off and when said external storage card has been cross authenticated with said general-purpose computer, said external storage card control mechanism transfers copyrighted music data to said external storage card even if power of said

central processing unit is turned off', the examiner does not find the argument persuasive. Again, it is the combination of Tatebayashi and Chan which renders this claim obvious. Tatebayashi teaches all of these limitations except that the functions may occur when the central processing unit is turned off. Chan teaches that a music reproduction system, analogous to the music reproduction system of Tatebayashi, can be provided with power and operational functionality while the CPU is powered off. Therefore, the ordinary person skilled in the art at the time of invention would have recognized that modifying the system of Tatebayashi by the teachings of Chan would result in a system where the full functionality of the reader/writer of Tatebayashi can function without the CPU being powered. Just as in Chan, the full functionality of the CD player can be utilized when the CPU is not powered. Therefore, the examiner does not find the argument persuasive.

Regarding the applicants' argument that the proposed combination of Tatebayashi and Chan would require substantial reconstruction or redesign of the systems, the examiner does not find the argument persuasive. First, the art of computer design is a predictable art, and there would be no undo experimentation required in order to combine the teachings of Tatebayashi and Chan. Second, the reader/writer of Tatebayashi is analogous to the CD drive of Chan, and replacing one with the other would be completely within the level of skill in the art at the time of invention. As such, the examiner does not find the argument persuasive.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the

time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). As explained above, the teachings of Tatebayashi and Chan alone provide the motivation to modify Tatebayashi by the teachings of Chan in the manner suggested. As stated above, the reader/writer of Tatebayashi is analogous to the CD drive of Chan, and thus it would be obvious to the ordinary person skilled in the art that when applying the teachings of Chan in the system of Tatebayashi, the CD drive would be replaced by the reader/writer of Tatebayashi. As such, the examiner does not find the argument persuasive.

The newly added claim limitations have been addressed below.

All objections and rejections not set forth below have been withdrawn.

Claims 12, and 15-26 have been examined and Claim 1-11, and 13-14 have been cancelled.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the transferring copyrighted music data to the external storage card even if power of said central processing unit is turned off must be shown or the feature(s) canceled from the claim(s). **No new matter should be entered.**

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure

must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: In this case, the newly claimed limitation of "transferring copyrighted music data to the external storage card even if power of said central processing unit is turned off" lacks support in the specification as originally filed. See the rejection of the claims under 35 USC 112 1st Paragraph below.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 12 and 15-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the

relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In this case, the newly added claim limitation reciting "transferring copyrighted music data to the external storage card even if power of said central processing unit is turned off" appears to lack support in the original specification. The applicant's have pointed to portions of the specification as showing support for this limitation. However, in these sections, as well as the remainder of the specification, the examiner is only able to find support for reproducing (i.e. playing) music content when the CPU is not powered. Further, the applicants have pointed to "original claim 15". The examiner points out that there is no "original claim 15" in this application as the original application only contained 9 claims. Further, previously presented claim 15, which cannot be relied upon as providing support for this new limitation, again only shows reproduction of the music data, and not storing music data to the memory card. Therefore, because the applicants have failed to show proper support for the newly claimed subject matter, and the examiner is unable to find such support in the specification as originally filed, one of ordinary skill in the art would not be able to determine whether the applicants were in possession of the invention as claimed at the time of application. Therefore, the claims are rejected for failing to meet the written description requirement of 35 USC 112 1st Paragraph.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject

matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 12, 14-19, 21-22, and 25-26, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tatebayashi et al. (U.S. Patent Number 6,859,535) hereinafter referred to as Tate, and further in view of Chan et al. (US Patent Number 6,226,237) hereinafter referred to as Chan.

Regarding claim 12, Tate disclosed a general-purpose computer having a central processing unit which can decode data stored in an internal storage mechanism as instructed by a program stored in said internal storage mechanism (See Tate Col. 8 Lines 31-51), comprising: a loading mechanism, which is integrally arranged on a case of said general-purpose computer, for detachably accommodating an external storage card (See Tate Fig. 2 Elements 501 and 300; note that Tatebayashi teaches that the memory card reader 400 and the memory card writer 300 can be one in the same, as can be seen in Tatebayashi Col. 51 Line 64 – Col. 52 Line 11); a decoding mechanism configured to decode data read from said external storage card (See Tate Col. 8 Lines 31-51 and Fig. 6 Element 460); a reproduction mechanism configured to reproduce decoded data decoded by said decoding mechanism (See Col. 8 Lines 31-51); and said loading mechanism is configured to read said decoded data based on commands from said central processing unit when said general-purpose computer is in an active state (See Tate Col. 52 Paragraph 1), and a cross-authentication mechanism configured to cross-authenticate said external storage card through said loading mechanism (See Tate Col. 11 Lines 3-20); and a control mechanism for supplying copyrighted data read from said external storage card to said reproducing mechanism upon

successful cross-authentication by said cross- authentication mechanism (See Col. 8 Lines 44-51), when said external storage card has been cross-authenticated with said general-purpose computer, an external storage card control mechanism plays copyrighted music data on a portable music playing device by connecting said external storage card to said portable music playing device (See Tate Col. 8 lines 44-51), but failed to disclose a power controller that supplies power to said general-purpose computer, wherein said power controller supplies power to said decoding mechanism and said reproduction mechanism even if power of said central processing unit is turned off, and said loading mechanism is configured to read said decoded data based on commands from an external storage card control mechanism integrally arranged on said case of said general-purpose computer, without control of a central processing unit when said general-purpose computer is in an inactive state, or wherein said power controller supplies power to said cross-authentication mechanism and said control mechanism even if power of said central processing unit is turned off, reproducing the copyrighted data even if power of said central processing unit is turned off, and an external storage card control mechanism transfers copyrighted music data to said external storage card even if power of said central processing unit is turned off.

Chan teaches that when computers reproduce audio from an external device, much of the power consumed by the computer is in peripherals not actually being used (See Chan Col. 1 Lines 29-37), and that unused portions of the computer, including the CPU, can be powered off (un-energized), and when the CPU is energized the CPU will control the audio playback commands, but when the CPU is not energized, an audio sub-system (106) should remain energized to control the playback of the audio without use of the CPU (See Chan Col. 8

Paragraphs 2-3). Chan further teaches the implementation of such a system utilizes an audio subsystem (106) which includes a power controller that supplies power to said general-purpose computer, wherein said power controller supplies power to said decoding mechanism and said reproduction mechanism even if power of said central processing unit is turned off (See Chan Col. 8 Paragraphs 2-3: wherein the "computer subsystem 104", which includes the CPU as can be seen in Fig. 1, is not energized), and said loading mechanism is configured to read audio data based on commands from an external storage card control mechanism of said general-purpose computer, without control of a central processing unit when said general-purpose computer is in an inactive state (See Chan Col. 10 Line 48 – Col. 11 Line 58), or wherein said power controller supplies power to said cross-authentication mechanism and said control mechanism even if power of said central processing unit is turned off (See Chan Col. 8 Paragraphs 2-3: wherein the "computer subsystem 104", which includes the CPU as can be seen in Fig. 1, is not energized).

Chan further teaches that the audio sub-system allows the selection and control of music being played without powering on the CPU (See Chan Col. 3 Lines 37-40).

Chan further teaches that the audio sub-system 106 should have a track number display and an Icon LCD which the audio subsystem uses to indicate operation (See Chan Col. 6 Lines 52-58).

It would have been obvious to the ordinary person skilled in the art at the time of invention to employ the teachings of Chan within the audio reproduction system of Tate by incorporating the audio subsystem 106 of Chan within the computer system 500 of Tate in order to shut off the power to the idle personal computer while reading and reproducing music data from the external medium by the content player subsystem, or by reading and reproducing the

data from the external medium by the content player subsystem without powering on the CPU, and having a display configured to display operating characteristics of the audio device when the computer is idle. This would have been obvious because the ordinary person skilled in the art would have been motivated to reduce the power consumed by the system. It further would have been obvious to the ordinary person skilled in the art at the time of invention to have employed the teachings of Chan by including control buttons in the audio subsystem. This would have been obvious because the ordinary person skilled in the art would have been motivated to provide a means for controlling the playback of the audio by the audio subsystem.

In this combination it would have been obvious to the ordinary person skilled in the art at the time of invention that the CD-ROM Drive 138 of Chan would be replaced with the memory card reader/writer 300 and memory card writer slot 501 of Tatebayashi (which is integrally arranged on the case of the personal computer 500 as can be seen in Fig. 2 of Tatebayashi) within the audio subsystem 106, and to have allowed full functionality of the reader/writer when the CPU was not powered, including writing music data to the memory card (Tatebayashi Col. 8 Lines 44-48). This would have been obvious because the ordinary person skilled in the art would have recognized that the preferred audio system of Tatebayashi was the memory card reader/writer, and not a CD-ROM drive.

In this combination it further would have been obvious to the ordinary person skilled in the art to have energized the card reader/writer and its components, including the mutual authentication unit, while the CPU of the personal computer and other components, which as taught by Chan are not essential to the content reproduction, are not energized. This would have

been obvious because the ordinary person skilled in the art would have been motivated to conserve energy while allowing for audio reproduction.

Regarding claim 15, Tate and Chan disclosed that in an inactive state in which no electric power is supplied to said general-purpose computer, an external storage card control mechanism reads copyrighted data from said external storage card and supplies said copyrighted data to a portable music playing device (See Tate Col. 8 Lines 44-51 and the rejection of claim 12 above).

Regarding claim 16, see the rejection of claim 12 above.

Regarding claim 17, Tate and Chan disclosed that a function equivalent to a portable music playing device is realized by executing, by a controller of said general-purpose computer, a program stored in said internal storage mechanism of said general-purpose computer (See Tate Col. 1 Lines 29-37 and Col. 8 Lines 31-51 and col. 52 Paragraph 1).

Regarding claim 18, Tate and Chan disclosed that said internal storage mechanism is a hard drive (See Tate Lines 31-34).

Regarding claim 19, Tate and Chan disclosed that said copyrighted data is encrypted copyrighted data (See Tate Abstract).

Regarding claim 21, Tate and Chan taught that said external storage card mechanism has programmable power key functionality (See Chan Col. 11 Lines 55-58).

Regarding claim 22, Tate and Chan taught that said loading mechanism is located on a side of a case enclosing a monitor for said general-purpose computer (Tate Fig. 2 Element 501).

Regarding claim 25, Tate and Chan taught that said encrypted data is encrypted by a Data Encryption Standard encryption/decryption unit included in said external storage card (Tate Col. 16 Lines 16-35).

Regarding claim 26, Tate and Chan taught that said Data Encryption Standard encryption/decryption unit has a random number generator configured to cross-authenticate said external storage card and share a session key with said external storage card (Tate Col. 14 Line 14 – Col. 15 Line 18).

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Tate and Chan as applied to claim 12 above, and further in view of Schneier (Applied Cryptography Second Edition).

Regarding claim 20, Tate and Chan disclosed that when said external storage card control mechanism is operated and said central processing unit is in said inactive state, the audio subsystem enters an initialize state (See Chan Col. 11 Lines 55-58), and in the initialize state, the audio subsystem causes the audio player to play (See Chan Col. 10 Lines 56-67). However, Tate and Chan failed to specifically disclose that in this case "a predetermined software program is executed".

Tate did, however, disclosed that in order to reproduce the encrypted content, the memory card reader and decrypts the encrypted content (See Tate Fig. 8), but Tate is silent as to whether the decryption process is performed using a software program, or whether it was performed using only hardware. Tate did disclose that the decryption occurs in the memory card reader and that the decryption algorithm was pre-stored in the decryption unit (See Tate Col. 10 Lines 23-29 and Col. 16 Lines 49-64 and Col. 14 Lines 14-20).

Schneier teaches that any encryption algorithm can be implemented in software, and that the advantages of doing so are in flexibility and portability, ease of use, and ease of upgrade (See Schneier Page 225).

It would have been obvious to the ordinary person skilled in the art at the time of invention to have employed the teachings of Schneier in the content reproduction system of Tate and Chan, by implementing the pre-stored decryption algorithm in software. This would have been obvious because the ordinary person skilled in the art would have been motivated to provide the decryption with flexibility and portability, ease of use, and ease of upgrade.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Tate and Chan as applied to claim 12 above, and further in view of Jones et al. (US Patent Number 6,697,944) hereinafter referred to as Jones.

While Tate and Chan taught providing power to the detachable portable reader/writer, Tate and Chan failed to specifically teach providing the power via a USB cable.

Jones teaches that USB cables can be used for providing data connections as well as power for battery powered portable devices (Jones Col. 9 Lines 34-52).

It would have been obvious to the ordinary person skilled in the art at the time of invention to have employed the teachings of Jones in the portable device system of Tate and Chan by providing the data and power connection to the reader/writer via a USB cable. This would have been obvious because the ordinary person skilled in the art would have been motivated to provide a specific means to the generic power providing of Tate and Chan.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Tate and Chan as applied to claim 12 above, and further in view of Boothroyd et al. (US Patent Number 5,267,123) hereinafter referred to as Boothroyd.

While Tate and Chan did teach a display, Tate and Chan failed to specifically teach a display located on a top side of a case enclosing a monitor for said general purpose computer, said display being visible even when said top said of said case is closed.

Boothroyd teaches a display which is located on a case and is visible when the lid of the case is closed (See Boothroyd Col. 1 Lines 26-31).

It would have been obvious to the ordinary person skilled in the art at the time of invention to employed the teachings of Boothroyd in the computer system of Tate and Chan by incorporating the pivotal display of Boothroyd in the computer. This would have been obvious because the ordinary person skilled in the art would have been motivated to have the screen be accessible when the computer lid is closed and protecting the keyboard.

Conclusion

Claims 12, 14-26 have been rejected.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW T. HENNING whose telephone number is (571)272-3790. The examiner can normally be reached on M-F 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571)272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew T Henning/
Examiner, Art Unit 2431

/William R. Korzuch/
Supervisory Patent Examiner, Art Unit 2431